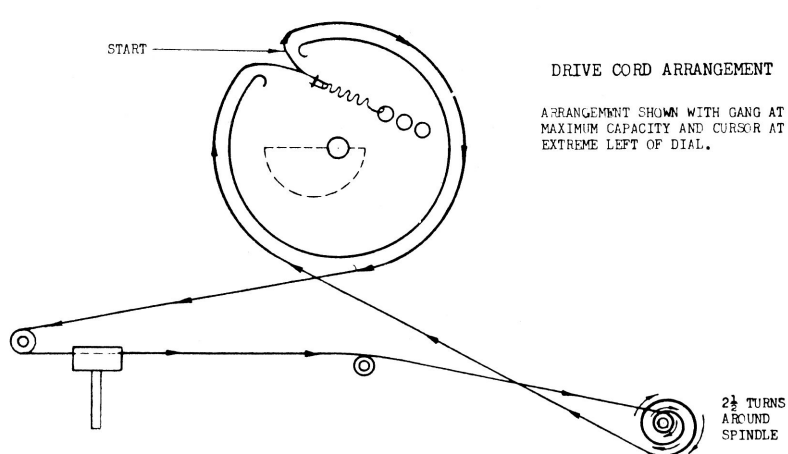




Marconi Model 408

CIRCUIT DESCRIPTION

Six-tube A.C. operated standard broadcast superheterodyne receiver, consisting of a tuned R.F. amplifier, converter-oscillator, one stage of intermediate frequency amplification, diode detector with AVC., two stages of audio amplification with a beam power output driving two 3 1/2" and one 8" permanent magnet loudspeakers.

FREQUENCY COVERAGE 535 - 1720 Kc.

POWER RATING 115 volts A.C. 25/60 cycles 0.5 amps.

POWER OUTPUT (U.P.O.) 0.5 watt

LOUDSPEAKER DATA

Cone Two 3 1/2-inch & one 8-inch
Field Alnico V Permanent Magnet
Voice Coil Impedance at 400 C.P.S. 3 1/2-inch - 3.2 ohms
Voice Coil Impedance at 400 C.P.S. 8-inch - 6.4 ohms
Output Transformer Primary Resistance 200 ohms
Output Transformer Primary Impedance 2500 ohms

TUBE COMPLEMENT

FUNCTION

12BA6 R.F. Amplifier
12BE6 Converter-Oscillator
12BA6 I.F. Amplifier
12AV6 Diode Det., AVC., 1st Audio Amplifier
35C5 Beam Power Amplifier
35W4 Half Wave Rectifier

ALIGNMENT PROCEDURE

Maximum performance depends on accurate alignment of the R.F. and I.F. circuits of the receiver; therefore, follow these instructions and the method outlined in the "ALIGNMENT CHART" carefully.

- Use isolation transformer if available. If not, connect a 0.25 mfd., condenser in series with low side of Signal Generator and "B" neutral.
- Make all alignment adjustments with the volume and tone controls set at maximum.
- Connect the output meter across the voice coil terminals.
- Keep the output of the Signal Generator as low as is consistent with serviceable meter readings.

NOTE: Before proceeding with R.F. alignment, check the position of the dial pointer by completely meshing the gang condenser and setting the pointer to the index mark at the extreme right of the dial backplate. Three additional marks are also provided for checking the calibration at 500, 1000 and 1500 Kc.

Marconi Model 408 (Chassis 413) Alignment Procedure

STEP	CONNECT S.G. OUTPUT TO	INPUT FREQUENCY	RECEIVER DIAL SETTING	ADJUST	CIRCUITS RESONATED	REMARKS
1	* C.G. 12BE6	455 K.C.	Gang at Minimum	Top & Bottom Aligners	No. 2 I.F.	Adjust
2	C.G. 12BE6	455 K.C.	Gang at Minimum	Top & Bottom Aligners	No. 1 I.F.	for
3	** Antenna	580 K.C.	580 K.C.	Oscillator Core	Oscillator	Maximum
4	Lead and			R.F. Core	R.F.	
5	Ground	1500 K.C.	1500 K.C.	C-6 C-5 C-4	Oscillator Converter R.F. Loop	Output
6	Check sensitivity and tracking at 1000 Kc. Bend plates if necessary.					
7	Repeat steps 3, 4 and 5.					
* Lug on Converter section (Centre) of gang capacitor forms a suitable point of connection. Apply signal through a 400 ohm resistor.						
** Apply signal through a standard dummy antenna.						

